

AS



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/744,811

01/30/2001

Hideki Kanemoto

L9289.01104

4612

7590

06/15/2004

Stevens Davis Miller & Mosher  
 Suite 850  
 1615 L Street NW  
 Washington, DC 20036

EXAMINER

LEE, ANDREW CHUNG CHEUN

ART UNIT

PAPER NUMBER

2664

3

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/744,811

Applicant(s)

KANEMOTO ET AL.

Examiner

Andrew C Lee

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings (Fig 1, 3, and 6) are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, (1) the packet signals being transmitted using a data channel and a control channel; (2) performing the transmit power control on a beginning unit transmission portion of a next packet on the data channel, based on the transmit power control information for a last unit transmission portion in the packet signal on the control channel; (3) the transmit power control determining the signal quality deterioration using the number of times the transmit power control information for increasing transmit power is repeated, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. Drawings for Fig. 1, 3 and 6 are objected because the Y-axis indicating as power increase and X-axis legend is not indicated (a function of time?). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. Drawings (Figs 6 and 7) are objected since the drawings do not show the claim limitations of claims 3, 4, and 9. The current drawings show the power control on pilot

Art Unit: 2664

signal portion and power control on transmission portion. They do not indicate clearly as claimed.

4. Drawings for Fig. 6 are objected because the legend "PILOT" indicated. It should be replaced with "CONTROL" so as in consistent with the specification and the claims.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: legends – eq, up and down. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;

- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

7. The abstract of the disclosure is objected to because the abstract does not disclose concisely whether the base station nor the remote/mobile station performing all the features as claimed – extracting means, determining means and control means. Correction is required. See MPEP § 608.01(b).

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

9. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

- Page 2, line 22, " for a long term"
- Page 5, line 25, " a plurality of times successively"
- Page 6, line 3-4 " the plurality of times"

- Page 8, line 16, " a predetermined number of times successively"; line 20, "predetermined number of times"
- Page 9, line 1 " repeated successively"; lines 7-8, "repeated successively a predetermined number of times"
- Page 11, lines 3-4, lines 11-12, lines 19-20, "repeated successively a predetermined number of times"
- Page 13, lines 4-5, " a pilot signal portion"; line 8, "a last pilot signal portion", line 25-26' "a pilot signal"
- Page 14, line 19, "while" should be deleted; lines 21-22" successively a predetermined number of times successively"; lines 26, " a last control signal portion"
- Page 15, lines 6-7, "repeated successively"; lines 9-10, " repeated successively a predetermined number of times"; line 13, "Then" should be deleted; line 15, "repeated successively"; line 18, "repeated successively"; line 25, " after the situation"
- Page 16, line 11-12," pilot signal portion"
- Page 17, line 7, " a last pilot signal"; line 9, Fig 5 should be corrected Fig 6. ; lines 17-18, 22-23, "repeated successively a predetermined number of times"; Lines 14 and 15, the brackets for ST601 and ST602 are missing. Line 24, "a pilot signal portion"
- Page 18, lines 3, 10, " repeated successively a predetermined number of time(s)"; line 5, "a pilot signal portion"

- Page 19 to 25, terms “ a pilot signal portion” etc.

***Claim Rejections - 35 USC § 103***

10. **Claims 1-10 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Esmailzadeh et al (US 6,175,744 B1) in view of Rom (US 5,450,616).

**Regarding Claims 1, 2 and 5**, Esmailzadeh et al discloses a transmission power control method and apparatus for controlling the power of a signal transmitted between a base station and a mobile terminal, which includes means for extracting transmit power control information from a packet signal comprised of transmission units each including the transmit power control information (column 2, lines 32-35); means for determining quality deterioration of the packet signal (column 2, lines 35-37); and means for performing control for halting transmit power control on a transmission unit to be transmitted after determining the quality deterioration on the packet signal, based on a determined result (column 2, lines 36-41, 51-53). He teaches performing the transmit power control on the packet signal (column 3, lines 8-12). He discloses storage means for storage the transmit power control information as in Claim 2 ( Fig 2, column 7, lines 49-54). He also discloses determining the quality deterioration using the number of times the transmit power control information for increasing transmit power is repeated as in Claim 5 (column 10, lines 49-55). But Esmailzadeh et al does not disclose extracting transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel; However, Rom

Art Unit: 2664

teaches transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel (Fig 4, column 5, lines 36-42; column 6, lines 20-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Esmailzadeh et al to include transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel as taught by Rom in order to obviate providing information in each of the power control feedback signals occupying a field in the data packet transmitted from the receiver to the transmitter of the data sending node, and the transmitter power signal indicating the radiated power control feedback signals comprising an instruction instructing the transmitter to adjust its radiated power. The transmitter of the data sending node may preferably adjust its radiated power based upon the power control feedback information signals received from the data receiving nodes.

**Regarding Claims 3, 4, 6 and 7,** Esmailzadeh et al discloses a transmission power control method and apparatus for controlling the power of a signal transmitted between a base station and a mobile terminal, which includes means for extracting transmit power control information from a packet signal comprised of transmission units each including the transmit power control information (column 2, lines 32-35); means for determining quality deterioration of the packet signal (column 2, lines 35-37); and means for performing control for halting transmit power control on a transmission unit to



Art Unit: 2664

be transmitted after determining the quality deterioration on the packet signal, based on a determined result (column 2, lines 36-41, 51-53). He also teaches transmit power control information, but not for a last unit transmission portion of the packet signal on the control channel, the control means performs the transmit power control on a beginning unit transmission portion of a next packet on the data channel (column 7, lines 33-36, column 8, lines 39-55). Esmailzadeh et al does not disclose extracting transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel; However, Rom teaches transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel (Fig 4, column 5, lines 36-42; column 6, lines 20-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Esmailzadeh et al to include transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel as taught by Rom in order to provide information in each of the power control feedback signals occupying a field in the data packet transmitted from the receiver to the transmitter of the data sending node, and the transmitter power signal indicating the radiated power control feedback signals comprising an instruction instructing the transmitter to adjust its radiated power. The transmitter of the data sending node may preferably adjust its radiated power

Art Unit: 2664

based upon the power control feedback information signals received from the data receiving nodes.

**Regarding Claims 8 and 10**, Esmailzadeh et al discloses the limitations of steps for extracting transmit power control information from a packet signal comprising of transmission units each including the transmit power control information (column 2, lines 32-35); for determining quality deterioration of the packet signal (column 2, lines 35-37); and (3) means for performing control for halting transmit power control on a transmission unit to be transmitted after determining the quality deterioration on the packet signal, based on a determined result.(column 2, lines 36-41, 51-53). He discloses steps of performing the transmit power control on a beginning unit transmission portion of a next packet, based on the transmit power control information for a transmission unit after determining the quality deterioration on the packet signal (column 2, lines 42-44, column 9, lines 26-32). He also teaches steps of the quality deterioration is determined using the number of times the transmit power control information for increasing transmit power is repeated successively (column 10, lines 49-55).

**Regarding Claim 9**, Esmailzadeh et al discloses the limitations of steps for extracting transmit power control information from a packet signal comprised of transmission units each including the transmit power control information for the packet signals using a data channel and a control channel (column 2, lines 32-35; column 6, lines 43-47); for determining quality deterioration of each of the packet signal (column 2, lines 35-37); and for performing control for halting transmit power control on a

Art Unit: 2664

transmission unit to be transmitted after determining the quality deterioration on the packet signal, based on a determined result (column 2, lines 36-41, 51-53). He does not disclose steps for performing the transmit power control on a beginning unit transmission portion of a next packet on the data channel, based on the transmit power control information for a last unit transmission portion in the packet signal on the control channel (column 7, lines 33-36, column 8, lines 39-55). However, Rom teaches transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel (Fig 4, column 5, lines 36-42; column 6, lines 20-49). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Esmailzadeh et al to include transmit power control information from packet signals each comprised of transmission units each including the transmit power control information, the packet signals being transmitted using a data channel and a control channel as taught by Rom in order to provide information in each of the power control feedback signals occupying a field in the data packet transmitted from the receiver to the transmitter of the data sending node, and the transmitter power signal indicating the radiated power control feedback signals comprising an instruction instructing the transmitter to adjust its radiated power. The transmitter of the data sending node may preferably adjust its radiated power based upon the power control feedback information signals received from the data receiving nodes.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C Lee whose telephone number is (703) 305-8086. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL

June 01, 2004

  
Ajit Patel  
Primary Examiner